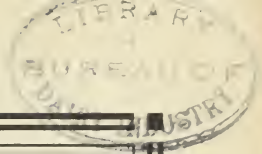


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HOW TO CONTROL RAGWEED

THE PRINCIPAL CAUSE OF AUTUMN HAY FEVER



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HOW TO CONTROL RAGWEED THE PRINCIPAL CAUSE OF AUTUMN HAY FEVER

By BESSIE W. GAHN, *Weed Investigations, Division of Botany, Bureau of Plant Industry*

Relation of Ragweed to Hay Fever

Hundreds of thousands of persons in the United States are subject to hay fever. Of this number, about 65 percent, according to the United States Public Health Service, suffer from autumn hay fever, more than 90 percent of the cases of which, east of the Mississippi River, are caused by the wind-borne pollen of ragweed.

The majority of hay-fever cases begin toward the end of the summer and last usually for a month or more each autumn. The first attack is usually followed by a recurrence each year, sometimes for 30 years or more, unless the patient goes to a locality free from ragweed pollen or unless the source of the pollen is removed from the locality in which he lives. An enormous amount of suffering can be obviated, therefore, by preventing ragweed plants from blooming and forming pollen.

Well-organized efforts of individuals, with the support of municipal authorities, should result in removing this menace to health from most cities. In cities and towns closely surrounded by extensive grainfields or located in a ragweed section in which high winds are frequent, municipal efforts to control ragweed pollen, in order to be completely successful, need to be supplemented by the cooperation of the landowners in the surrounding territory.

In country districts the removal of ragweed is more expensive, and complete eradication is more difficult to effect. The suffering from hay fever will be reduced, however, with the reduction in the area of ragweed plants. Such reduction is worth achieving, as the Public Health Service reports that persons with low susceptibility suffer from hay fever only when there is a great abundance of pollen in the air.

In some States the cutting of ragweed has been made obligatory by law.

Ragweed occurs in most parts of the United States and well up into Canada. Two species, common ragweed and big ragweed, both annuals, are chiefly responsible for autumn hay fever except in some of the Western States. According to a Public Health Service report on the seasons, causes, and geographic distribution of hay fever (reprint no. 610), the majority of hay-fever cases in Nevada, Idaho, Colorado, California, Arizona, New Mexico, Oregon, South Dakota, Texas, Washington, and Wyoming are caused by pollen of sagebrush (*Artemisia*), bur-sage (*Franseria*), and sumpweed (*Iva*).

In the illustration on the front page big ragweed is shown at the left and common ragweed at the right.

Description

Common ragweed (*Ambrosia elatior*) is usually not over 2 feet high, although it sometimes reaches a height of 5 feet. Its dull-green leaves are deeply cut and look much like the leaves of a fern. Big ragweed (*A. trifida*) often reaches a height of 8 to 10 feet and is distinguished by its large 3- or 5-lobed leaves. The clusters of greenish or greenish-white male flowers of both these ragweeds are arranged in long terminal spikes. At maturity the flowers release large quantities of yellow pollen, which floats on a moderate wind for long distances, and in a strong wind is often carried for miles.

Control

Ragweed may be controlled by cutting twice each year, first just before the flowers form and again before flowers develop on the low-growing branches that shoot out after the first cutting. The proper time for cutting varies according to seasonal conditions in different localities. In the vicinity of Washington, D.C., big ragweed begins flowering about August 10 and common ragweed about September 1. If the cutting is delayed until flower buds have formed, pollen will ripen on the severed plants. Such plants should be burned.

The cutting of ragweed along highways and on vacant lots of cities and suburbs is especially important.

In gardens and when growing with cultivated plants ragweed should be cut below the surface of the soil each time new plants come up from seed already in the ground. Repeated cultivation of such places hastens the germination of buried seeds.

In corn and other field crops, ragweed is controlled by early cultivation to kill the young weeds and by later cultivation after the crops are harvested. Close rotation of crops is advised in such places, especially a rotation that involves the plowing of the field immediately after harvest.

Stubble lands where ragweed is prevalent should be plowed shallow before the ragweed forms flowers. In a region in which there is danger of soil washing after plowing, the land should be planted to a suitable cover crop. If the area has been seeded to grass with the grain, the autumn growth of ragweed should be cut with a mowing machine before the plants bloom.

Ragweed-infested pastures should be mowed just before the weed begins to flower. To prevent the cutting of desirable grasses, the cutter bar of the mowing machine should be raised so that the ragweed may be cut 8 to 10 inches from the ground. Later in the season a second cutting may be necessary, and at that time the cutter bar should be set close to the ground in order to cut off the low-growing branches that may have developed since the first cutting. If pastures are heavily infested with ragweed, it may be desirable to reseed and fertilize them in order to stimulate a more vigorous growth of grass and thus reduce the amount of ragweed.

